

PRELIMINARY GRADING PLAN

NOTES

1. GROSS AREA: 340.84 ACRES
NET AREA: 338.55 ACRES
2. APR 141-230-26 & 141-230-33
3. TOPOGRAPHIC SOURCE: VERTICAL MAPPING, FLOWN 5/8/2009
4. THIS PLAN IS PROVIDED TO ALLOW FOR FULL AND ADEQUATE DISCRETIONARY REVIEW OF A PROPOSED DEVELOPMENT PROJECT. THE PROPERTY OWNER ACKNOWLEDGES THAT ACCEPTANCE OR APPROVAL OF THIS PLAN DOES NOT CONSTITUTE AN APPROVAL TO PERFORM ANY GRADING SHOWN HEREON, AND AGREES TO OBTAIN VALID GRADING PERMITS BEFORE COMMENCING SUCH ACTIVITY.
5. TAX RATE AREA: 58007
6. THE ENTIRE SITE IS SUBJECT TO INUNDATION BY THE 100-YEAR FLOOD AND IS WITHIN FEMA MAP NO. 0607300675F THE LIMITS OF THE 100-YEAR FLOOD ALONG THE WATERCOURSE WHICH FLOWS THROUGH THE PROPERTY.
7. ALL SITE ACCESS GATES (2 EXISTING & 1 PROPOSED) TO BE EQUIPPED WITH STROBE LIGHT ACTIVATION AND KNOX KEY-OPERATED SWITCH.
8. PROPOSED SLOPE RATIOS: NOT GREATER THAN 1.5 TO 1 ON CUT SLOPE
NOT GREATER THAN 2 TO 1 ON FILL SLOPE
9. LIGHTING FOR MAINTENANCE AND SECURITY PROPOSES ONLY. SHIELDED LIGHTING LOCATED AT GATES, ENTRANCES AND STORAGE BUILDING AND SHALL CONFORM TO COUNTY OF SAN DIEGO OUTDOOR LIGHTING REQUIREMENTS.
10. ALL DISTURBED AREAS WOULD BE COVERED WITH GRAVEL OR A BINDING AGENT TO REDUCE DUST.
11. THE ENTIRETY OF THE PARCEL ENCOMBERED BY MUP 09-012 (APN 141-230-26-00) IS SUBJECT TO THE RESTRICTIONS AND TERMS OF A COUNTY AVIATION EASEMENT.

SUMMARY OF LID/SITE DESIGN BMPs

- PRESERVE NATURAL AREAS
- MINIMIZE DISTURBANCE TO NATURAL DRAINAGE AREAS
- MINIMIZE & DISCONNECT IMPERVIOUS SURFACES
- MINIMIZE SOIL COMPACTION
- IMPERVIOUS SURFACES DRAIN TO ADJACENT INFILTRATION TRENCHES
- MINIMIZE EROSION FROM SLOPES

SUMMARY OF SOURCE CONTROL BMPs

- MATERIAL STORAGE AREAS
- EQUIPMENT CLEANING (SOLAR PANELS, NOT VEHICLES OR OTHER MECHANICAL EQUIPMENT) WILL BE TERMINATED PRIOR TO CAUSING RUNOFF

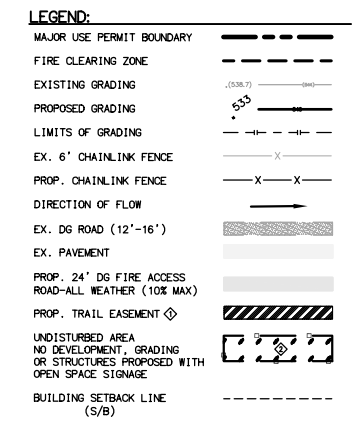
SUMMARY OF TREATMENT CONTROL BMPs

- INFILTRATION TRENCHES (SEE DETAIL ON SHEET #2)

TYPICAL SECTION PERIMETER FIRE ACCESS ROAD WITH TRAIL EASEMENT
NOT TO SCALE

TYPICAL SECTION PERIMETER FIRE ACCESS ROAD
NOT TO SCALE

EXISTING ACCESS ROAD
NOT TO SCALE



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PRELIMINARY GRADING PLAN

DETAIL - BORREGO SUBSTATION AND EXPANSION AREA

SCALE: 1"=200'

NOTE:
CLEARING AND GRUBBING FOR SUBSTATION EXPANSION
WILL BE BY SEPARATE PERMIT.

TYP. SECTION - INFILTRATION TRENCH

N.T.S.

NOTE:
INFILTRATION TRENCHES WILL BE CONSTRUCTED DOWNSLOPE FROM EACH OF THE 38 INVERTER BUILDING PADS, TWO ON-SITE SUBSTATIONS AND STORAGE BUILDING.
* THE BORREGO SUBSTATION EXPANSION AREA WILL HAVE TRENCH WIDTH OF 3.5'.

LEGEND:

- MAJOR USE PERMIT BOUNDARY
- FIRE CLEARING ZONE
- EXISTING GRADING
- PROPOSED GRADING
- LIMITS OF GRADING
- EX. 6" CHAINLINK FENCE
- PROP. CHAINLINK FENCE
- DIRECTION OF FLOW
- EX. DG ROAD (12'-16')
- EX. PAVEMENT
- PROP. 24" DG FIRE ACCESS ROAD-ALL WEATHER (10X MAX)
- PROP. TRAIL EASEMENT
- UNDISTURBED AREA NO DEVELOPMENT, GRADING OR STRUCTURES PROPOSED WITH OPEN SPACE SIGNAGE
- BUILDING SETBACK LINE (S/B)

PROJECT STRUCTURES COVERAGE TABLE

ITEM DESCRIPTION	AREA	UNIT	QUANTITY	TOTAL AREA	UNIT
INVERTER BUILDING (12' X 26.5')	400	SF	38	15,200	SF
STORAGE BLDG. (20' X 30')	600	SF	1	600	SF
SUBSTATION WITH CONTROL ROOM	3000	SF	2	6,000	SF
		SUB TOTAL		21,800	SF
		EQUIV=		0.50	AC
SOLAR PANEL (6.5' X 51')	436	SF	10,288	102.97	AC
		TOTAL		103.47	AC
		% OF LOT COVERAGE		28.5%	30.8%

STRUCTURES COVERAGE TABLE BY PARCEL

52 AC	288 AC	UNIT		
2,000	13,200	SF		
600	-	SF		
3,000	3,000	SF		
5,600	16,200	SF		
		0.13	0.37	AC
		14.68	88.29	AC
		14.81	88.66	AC
		28.5%	30.8%	

PROPOSED EASEMENTS

DESCRIPTION
15' TRAIL EASEMENT
OPEN SPACE EASEMENT
30' UTILITY & ACCESS EASEMENT

EXISTING EASEMENTS*

DESCRIPTION	DISPOSITION
SDGME EASEMENT	TO REMAIN
COUNTY ROAD EASEMENT	TO REMAIN
PRIVATE ROAD EASEMENT	TO REMAIN
PRIVATE ROAD EASEMENT	TO REMAIN
PRIVATE ROAD EASEMENT	TO REMAIN
ACCESS & UTILITY EASEMENT (200' RADIUS)	TO REMAIN

PHOTOVOLTAIC SOLAR FARM

BORREGO SPRINGS, CA

MUP PLOT PLAN 09-012 & 09-014

ER NO. 09-05-001 - RPL2

PRELIMINARY GRADING PLAN

JUNE 16, 2010
SHEET 2 OF 3

RBF

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PRELIMINARY GRADING PLAN

ENVIRONMENTAL CONDITIONS

PRE-CONSTRUCTION MEETING: (Prior to Preconstruction Conference, and prior to any clearing, grubbing, trenching, grading, or any land disturbances.)

1. **“TEMPORARY FENCING: [DPLU, PCC] [DPW, PDCI] [PC] [MITIGATION]. Intent:** In order to prevent inadvertent disturbance to the on-site cultural resources, temporary construction fencing shall be installed. **Description of Requirement:** Prior to the commencement of any grading and or clearing in association with this grading plan, temporary orange construction fencing shall be placed to protect from inadvertent disturbance of all open space easements that do not allow grading, brushing or clearing.

1. Temporary fencing is also required in all locations of the project where proposed grading or clearing is within 100 feet of an open space easement boundary.
2. The placement of such fencing shall be approved by the DPLU, Permit Compliance Section. Upon approval, the fencing shall remain in place until the conclusion of grading activities after which the fencing shall be removed.

Documentation: The applicant shall have a California licensed surveyor install and certify the installation of the temporary fencing. The applicant shall submit photos of the fencing along with the certification letter to the [DPLU, PCC] for approval. **Timing:** Prior to Preconstruction Conference, and prior to any clearing, grubbing, trenching, grading, or any land disturbances the fencing shall be installed, and shall remain for the duration of the grading and clearing. **Monitoring:** The [DPLU, PCC] shall either attend the preconstruction conference and approve the installation of the temporary fencing, or review the certification and pictures provided by the applicant's surveyor.”

DURING CONTRUCTION: (The following actions shall occur throughout the duration of the grading construction).

(BIOLOGICAL RESOURCES)

2. **“BIOLOGICAL MONITORING: [DPLU, PCC] [DPW, PDCI] [PC] [MITIGATION]. Intent:** In order to prevent inadvertent disturbance to Flat tailed horned lizard and Colorado desert fringe toed lizard, all grading located and disturbances located onsite and offsite shall be monitored by a biological monitor. **Description of Requirement:** A County approved biologist shall perform biological monitoring during all grading, clearing, grubbing, trenching, and construction activities on and offsite. The Project Biologist shall supervise and monitor grading activities to ensure against damage to biological resources that are intended to be protected and preserved. The monitor(s) shall be on site during all grading and clearing activities on and off site that are in or adjacent to any sensitive habitats. If there are disturbances, the monitor must report them immediately to the [DPLU PCC]. Additionally, the biologist shall perform the following duties as specified in the Flat tailed horned lizard rangewide management strategy:

a. Monitoring Requirements:

1. Perform weekly inspection of fencing and erosion control measures (daily during rain events) near proposed preservation areas and report deficiencies immediately to the DPW Construction Inspector;
2. Perform periodically monitor the work area for excessive dust generation in compliance with the County grading ordinance and report deficiencies immediately to the DPW Construction Inspector;
3. Conduct training for contractors and construction personnel, including the purpose for resource protection, a description of the FTHL and its habitat, and the conservation measures that should be implemented during project construction;
4. Monitor construction lighting periodically to ensure lighting is the lowest illumination possible allowed for safety, selectively placed, shielded, and directed away from preserved habitat;
5. Monitor equipment maintenance, staging, and fuel dispensing areas to ensure there is no runoff to Waters of the US;
6. Stop or divert all work when deficiencies require mediation and notify DPW Construction Inspector and DPLU Permit Compliance Section within 24 hours; (8) produce periodic (monthly during grading) and final reports and submit to the Wildlife Agencdes and the DPLU (final report will release bond);
7. Attend construction meetings and other meetings as necessary.

a. Fencing Protocol:

Install lizard barrier fencing for the exclusion of the lizards prior to surveying the parcels during construction as follows:

1. The barrier fence shall be constructed along the entire perimeter of the site, and be inset sufficiently from the perimeter of the parcel to allow for construction and maintenance.
2. Barrier material shall be 0.25" mesh hardware cloth and 36" in height.
3. Barrier material shall be buried 6" deep, providing 30" above the surface.
4. Barrier material shall be securely attached to t-posts or fence posts and barbed wire strung at heights of 15" and 30" (A third barbed wire shall be strung above the FTHL-proof fencing, using metal clips or wire.
5. Additional t-posts or fence posts shall be placed at any junctions between rolls of hardware cloth to discourage the formation of gaps.

b. Removal Survey Protocol:

Once the barrier fencing has been installed, the project biologist shall conduct the lizard removal surveys. The surveys shall follow the following guidelines:

1. Surveys shall be conducted by experienced biological monitors.
2. Surveys shall occur only during appropriate survey conditions as described in Appendix 6 of the plan under optimal temperature conditions, etc.)
3. Minimum survey effort shall be 0.5 hour per acre, unless otherwise required by the County of San Diego.
4. Survey methods shall be designed to achieve a maxmal capture rate and shall include but not be limited to the following: strip transects, tracking, and raking around shrubs.
5. Survey methods shall incorporate a systematic component to ensure that the entire fenced project site is surveyed. A modification of the Population Monitoring Protocol (Appendix 7 of the rangewide management strategy plan) may be used.

Documentation: The Project Biologist shall prepare and submit to the satisfaction the [DPLU, PCC] monitoring reports, which indicate that the monitoring has occurred as indicated above. **Timing:** The following actions shall occur throughout the duration of the grading construction. **Monitoring:** The [DPW, PDCI] shall assure that the Project Biologist is on-site performing the Monitoring duties of this condition during all applicable grading activities as determined by the Biologist. The [DPW, PDCI] shall contact the [DPLU, PCC] if the Project Biologist or applicant fails to comply with this condition. The [DPLU, PCC] shall review and approve the monitoring reports for compliance with this condition.

3. “RESOURCE AVOIDANCE: [DPLU, PCC] [DPW, PDCI] [MITIGATION].

Intent: In order to avoid impacts to breeding avian species, which is a sensitive biological resource pursuant to CEQA, a Resource Avoidance Area (RAA), shall be implemented on all plans. **Description of Requirement:** There shall be no brushing, clearing and/or grading on any portion of the project parcels within 300 feet of active nests during the breeding season of the loggerhead shrike. The breeding season is defined as occurring between March 1 and August 31. The Director of Planning and Land Use [DPLU, PCC] may waive this condition, provided that no loggerhead shrike nests are present in the vicinity of the brushing, clearing or grading. **Documentation:** The applicant shall provide a letter of agreement with this condition; alternatively, the applicant may submit a written request for waiver of this condition. No Grading shall occur within the RAA until concurrence of the waiver is received from the County and California Department of Fish and Game. **Timing:** Prior to preconstruction conference and prior to any clearing, grubbing, trenching, grading, or any land disturbances and throughout the duration of the grading and construction, compliance with this condition is mandatory. **Monitoring:** The [DPW, PDCI] shall not allow any grading in the RAA during the specified dates, unless the conditions have been met.

(CULTURAL RESOURCES)

4. ARCHAEOLOGICAL MONITORING: [DPW, PDCI] [DPLU, PCC] [MITIGATION]. Intent: In order to comply with Mitigation Monitoring and Reporting Program pursuant to Eurus MUP 09-012 and MUP 09-014, and the County of San Diego Guidelines for Determining Significance and Report Format and Content Requirements for Archeological and Historic Resources , Cultural Resource Grading Monitoring Program shall be implemented. **Description of Requirement:** The Project Archaeologist (and Native American Monitor, if contracted) shall monitor original cutting of previously undisturbed deposits in all areas identified for development including off-site improvements. The grading monitoring program shall comply with the following requirements during grading:

a. “During the original cutting of previously undisturbed deposits, the Project Archaeologist and Native American Monitor shall be onsite as determined necessary by the Project Archaeologist. Inspections will vary based on the rate of excavation, the materials excavated, and the presence and abundance of artifacts and features. The frequency and location of inspections will be determined by the Project Archaeologist in consultation with the Native American Monitor. Monitoring of cutting of previously disturbed deposits will be determined by the Project Archaeologist.”

b. “In the event that previously unidentified potentially significant cultural resources are discovered, the Project Archaeologist, in consultation with the Native American monitor, shall have the authority to divert or temporarily halt ground disturbance operations in the area of discovery to allow evaluation of potentially significant cultural resources. At the time of discovery, the Project Archaeologist shall contact the DPLU Staff Archaeologist. The Project Archaeologist, in consultation with the DPLU Staff Archaeologist, shall determine the significance of the discovered resources. Construction activities will be allowed to resume in the affected area only after the DPLU Staff Archaeologist has concurred with the evaluation. For significant cultural resources, a Research Design and Data Recovery Program to mitigate impacts shall be prepared by the Project Archaeologist and approved by the Staff Archaeologist, then carried out using professional archaeological methods.”.

c. “If any human bones are discovered, the Project Archaeologist shall contact the County Coroner and the DPLU Staff Archaeologist. If the remains are determined to be of Native American origin, the Most Likely Descendant, as identified by the Native American Heritage Commission, shall be contacted by the Project Archaeologist in order to determine proper treatment and disposition of the remains.”

d. “The Project Archaeologist shall submit monthly status reports to the Director of Planning and Land Use starting from the date of the Notice to Proceed to termination of implementation of the grading monitoring program. The reports shall briefly summarize all activities during the period and the status of progress on overall plan implementation. Upon completion of the implementation phase, a final report shall be submitted describing the plan compliance procedures and site conditions before and after construction.”

Documentation: The applicant shall implement the grading monitoring program pursuant to this condition. **Timing:** The following actions shall occur throughout the duration of the grading construction activities. **Monitoring:** The [DPW, PDCI] shall make sure that the Project Archeologist is on-site performing the Monitoring duties of this condition. The [DPW, PDCI] shall contact the [DPLU, PCC] if the Project Archeologist or applicant fails to comply with this condition.

(AIR QUALITY)

5. AIR QUALITY: [DPW, PDCI] [MITIGATION].

Intent: In order to comply with Mitigation Monitoring and Reporting Program pursuant to Eurus MUP 09-012 to mitigate for fugitive dust caused by construction activities the following dust control measures shall be implemented. **Description of Requirement:** The project shall comply with the following Air Quality measures:

- a. All haul/dump trucks entering or leaving the site with soil or fill material must maintain at least 2 feet of freeboard or cover loads of all haul/dump trucks securely (unnumbered design measure).
- b. Dust control measures of the Grading Ordinance will be enhanced with a minimum of three (3) daily applications of water to the construction areas, between dozer/scrapper passes and on any unpaved roads within the project limits.
- c. Grading is to be terminated in winds exceed 25 mph.
- d. Sweepers and water trucks shall be used to control dust and debris at public street access points.
- e. Dirt storage piles will be stabilized by chemical binders, tarps, fencing or other suppression measures.
- f. Internal construction-roadways will be stabilized by paving, chip sealing or chemicals after rough grading.
- g. A minimum of 10 - 15 mph signs shall be posted and enforced on unpaved areas during construction.

Documentation: The applicant shall comply with the Air Quality requirements of this condition. **Timing:** The following actions shall occur throughout the duration of the grading construction **Monitoring:** The [DPW, PDCI] shall make sure that the grading contractor complies with the Air Quality requirements of this condition. The [DPW, PDCI] shall contact the [DPLU, PCC] if the applicant fails to comply with this condition.

ROUGH GRADING: (Prior to rough grading approval and issuance of any building permit).

(BIOLOGICAL RESOURCES)

6. BIOLOGICAL MONITORING: [DPLU, PCC] [RG, BP] [MITIGATION].

Intent: In order to comply with the adopted Mitigation Monitoring and Reporting Program (MMRP) pursuant MUP 09-012, and the County of San Diego Guidelines for Determining Significance and Report Format and Content Requirements for Biological Resources, a Grading Monitoring Program shall be implemented. **Description of Requirement:** The Project Biologist shall prepare and submit a final letter report substantiating his/her supervision of the grading activities and substantiating that grading did not impact inadvertent disturbance to Flat tailed horned lizard and Colorado desert fringe toed lizard. The report shall conform to the County of San Diego Report Format Guidelines for Biological Resources. It shall also include but not be limited to the following items:

- a. Photos of the temporary fencing that was installed during the trenching, grading, or clearing activities.
- b. Monitoring logs showing the date and time that the monitor was on site.
- c. Photos of the site after the grading and clearing activities.

Documentation: The applicant shall submit the final biological monitoring report to the [DPLU, PCC] for review and approval. **Timing:** Upon completion of all grading activities, and prior to Rough Grading final Inspection (Grading Ordinance SEC 87.421.a.2), the final report shall be completed. **Monitoring:** The [DPLU, PCC] shall review the final report for compliance with the project MMRP, and inform [DPW, PDCI] that the requirement is completed.

(CULTURAL RESOURCES)

7. ARCHAEOLOGICAL MONITORING: [DPLU, PCC] [RG, BP] [MITIGATION]. Intent: In order to comply with the adopted Mitigation Monitoring and Reporting Program (MMRP) pursuant to Eurus MUP 09-012 and MUP 09-014, and the County of San Diego Guidelines for Determining Significance and Report Format and Content Requirements for Archaeological Resources, a Grading Monitoring Program shall be implemented. **Description of Requirement:** The Project Archaeologist shall prepare one of the following reports upon completion of the grading activities that require monitoring:

a. If no archaeological resources are encountered during grading, then submit a final Negative Monitoring Report substantiating that grading activities are completed and no cultural resources were encountered. Monitoring logs showing the date and time that the monitor was on site must be included in the Negative Monitoring Report.

b. If archaeological resources were encountered during grading, the Project Archaeologist shall provide a Monitoring Report stating that the field grading monitoring activities have been completed, and that resources have been encountered. The report shall detail all cultural artifacts and deposits discovered during monitoring and the anticipated time schedule for completion of the curation phase of the monitoring.

Documentation: The applicant shall submit the Monitoring report to the [DPLU, PCC] for review and approval. **Timing:** Upon completion of all grading activities, and prior to Rough Grading final Inspection (Grading Ordinance SEC 87.421.a.2), the report shall be completed. **Monitoring:** The [DPLU, PCC] shall review the report or field monitoring memo for compliance with the project MMRP, and inform [DPW, PDCI] that the requirement is completed.

FINAL GRADING RELEASE: (Prior to any occupancy, final grading release, or use of the premises in reliance of this permit).

(CULTURAL RESOURCES)

8. “EASEMENT AVOIDANCE: [DPLU, PCC] [DPW, PDCI] [MITIGATION].

Intent: In order to protect sensitive resources, pursuant to County Grading Ordinance Section 87.112 the open space easements shall be avoided. **Description of Requirement:** The easement indicated on this plan is for the protection of sensitive environmental resources (Cultural Resources) and prohibits all of the following on any portion of the land subject to said easement: grading; excavation; placement of soil, sand, rock, gravel, or other material; clearing of vegetation; construction, erection, or placement of any building or structure; vehicular activities; trash dumping; or use for any purpose other than as open space. It is unlawful to grade or clear within an open space easement, any disturbance shall constitute a violation of the County Grading Ordinance Section 87.112 and will result in enforcement action and restoration. **Documentation:** The applicant shall provide a letter statement to the [DPLU, PCC] stating that all Sensitive Resource Easements were avoided during the grading construction, and that no impacts or encroachment into the open space occurred. **Timing:** Prior to Final Grading Release the letter verifying the easements were not disturbed shall be submitted. **Monitoring:** The [DPW, PDCI] shall not allow any grading, clearing or encroachment into the open space easement.”

9. ARCHAEOLOGICAL MONITORING: [DPLU, PCC] [RG, BP] [MITIGATION]. Intent: In order to comply with the adopted Mitigation Monitoring and Reporting Program (MMRP) pursuant to Eurus MUP 09-012 and MUP 09-014, and the County of San Diego Guidelines for Determining Significance and Report Format and Content Requirements for Archaeological Resources, a Grading Monitoring Program shall be implemented. **Description of Requirement:** The Project Archaeologist shall prepare a final report that documents the results, analysis, and conclusions of all phases of the Archaeological Monitoring Program if cultural resources were encountered during grading. The report shall include the following:

a. Department of Parks and Recreation Primary and Archaeological Site forms.

b. Daily Monitoring Logs

c. Evidence that all cultural resources collected during the grading monitoring program have been submitted to a San Diego curation facility that meets federal standards per 36 CFR Part 79, and, therefore, would be professionally curated and made available to other archaeologists/researchers for further study. The collections and associated records, including title, shall be transferred to the San Diego curation facility and shall be accompanied by payment of the fees necessary for permanent curation. Evidence shall be in the form of a letter from the curation facility stating that archaeological materials have been received and that all fees have been paid.

d. If no cultural resources are discovered, a brief letter to that effect must be submitted stating that the grading monitoring activities have been completed. Daily Monitoring Logs must be submitted with the negative monitoring report.

Documentation: The applicant shall submit the report to the [DPLU, PCC] for review and approval. **Timing:** Prior to the occupancy of any structure or use of the premises in reliance of MUP 09-012 and MUP 09-014, and prior to Final Grading Release (Grading Ordinance Sec. 87.421.a.3), the final report shall be completed. **Monitoring:** The [DPLU, PCC] shall review the final report for compliance with the project MMRP, and inform [DPW, PDCI] that the requirement is completed.

PHOTOVOLTAIC
SOLAR FARM
BORREGO SPRINGS, CA
MUP PLOT PLAN 09-012 & 09-014
ER NO. 09-05-001 - RPL2
PRELIMINARY GRADING PLAN

JUNE 16, 2010
SHEET 3 OF 3

